

Amendments to the Claims

A complete set of the existing claims are set forth below, with the amended claims showing deletions (~~strike-through~~) and insertions (underline).

1. (Currently Amended) In an apparatus, a method of operation comprising:

powering the apparatus from a backup power source, in response to the apparatus being in an AC absence condition;

initiating a suspend to memory process to place the apparatus in a suspended to memory state, wherein no further activities occurs while the apparatus is in the suspended to memory state including suspension of all data transmissions; and

after further drawing on the backup power source for a period of time while the apparatus is in the suspended to memory state, automatically shutting off the backup power source.

2. (Original) The method of claim 1, wherein the placing includes scheduling a real time clock (RTC) to initiate waking of the apparatus after the period of time, to facilitate the shutting off of the backup power source.

3. (Original) The method of claim 2, wherein the placing comprises intervening by a basic input/output system (BIOS) in a process initiated by an operating system (OS) of the apparatus to suspend the apparatus to memory, in response to the AC absence condition, to schedule the RTC to initiate waking of the apparatus after the period of time.

4. (Original) The method of claim 2, wherein the method further comprises a basic input/output system (BIOS) canceling the scheduled waking of the apparatus by the RTC as part of a resume process initiated in response to AC being re-present at the apparatus.

5. (Original) The method of claim 2, wherein the method further comprises the RTC initiating waking of the apparatus, after passing of the period of time, including as part of waking of the apparatus, a basic input/output system (BIOS) causing the backup power source to be shut off, transitioning the apparatus to an un-powered state instead.

6. (Original) The method of claim 5, wherein the BIOS causes the backup power source to be shut off as part of the waking of the apparatus if AC remains absent.

7. (Original) The method of claim 1, wherein the method further comprises placing the apparatus in a suspended to memory state in response to the AC absence condition, including setting a timer to expire after the period of time, to facilitate the shutting off of the backup power source.

8. (Original) The method of claim 7, wherein the placing comprises intervening by a basic input/output system (BIOS) in a process initiated by an operating system (OS) of the apparatus to suspend the apparatus to memory, in response to the AC absence condition, to set the timer to expire after the period of time.

9. (Original) The method of claim 7, wherein the method further comprises a basic input/output system (BIOS) canceling the scheduled expiration of the timer as part of a resume process initiated in response to AC returning.

10. (Original) The method of claim 7, wherein the method further comprises

the timer expiring after passing of the period of time; and

a companion logic of the timer shutting off of the backup power source, placing the apparatus in an un-powered state.

11. (Original) The method of claim 10, wherein the timer shuts off the backup power source if AC remains absent.

12. (Original) The method of claim 1, wherein the method further comprises

monitoring for absence of AC to the power supply; and

generating a signal indicating AC absence on detection of absence of AC to the power supply.

13. (Original) The method of claim 12, wherein the monitoring and generating are performed by the power supply.

14. (Previously Presented) The method of claim 1, wherein the method further comprises accepting by the apparatus a specification of the period of time.

15. (Currently Amended) A system comprising:

a power supply to supply power to the system, including a backup power source to supply power during absence of AC to the power supply; and

an arrangement coupled to the power supply to shut off the power supply, after initiating a suspend to memory process to place the system in a suspended to memory state, wherein no further activities occurs while the system is in the suspended to memory state including suspension of all data transmissions, and after further drawing on the backup power source to power the system for a period of time while the system is in the suspend to memory state during the AC absence.

16. (Original) The system of claim 15, wherein the arrangement comprises a real time clock (RTC) employable to initiate waking of the system after the period of time, to facilitate shutting off of the backup power source.

17. (Original) The system of claim 16, wherein the arrangement further comprises a basic I/O system (BIOS) operatively coupled to the RTC to intervene in a process initiated by an operating system (OS) to suspend the system to memory, to schedule the RTC to initiate waking of the system after the period of time.

18. (Original) The system of claim 16, wherein the arrangement further comprises a basic I/O system (BIOS) equipped to cancel the scheduled initiation of waking of the system by the RTC as part of a resume process to resume the system to an active state in response to AC being re-present at the system.

19. (Original) The system of claim 16, wherein the arrangement further comprises a basic I/O system (BIOS) equipped to cause the backup power source to be shut off when the RTC initiates waking of the system.

20. (Original) The system of claim 17, wherein the BIOS is further equipped to cause the backup power source to be shut off if AC remains absent.

21. (Original) The system of claim 15, wherein the arrangement comprises a timer settable to expire after the period of time, to facilitate shutting off of the backup power source.

22. (Original) The system of claim 21, wherein the arrangement further comprises a basic I/O system (BIOS) operatively coupled to the timer to intervene in a process initiated by an operating system (OS) to suspend the system to memory, to schedule the timer to expire after the period of time.

23. (Original) The system of claim 22, wherein the BIOS is further equipped to cancel the scheduled expiration of the timer as part of a resume process to resume the system to an active state in response to AC being re-present at the system.

24. (Original) The system of claim 23, wherein the system further comprises a circuit coupled to the timer to generate a shut off signal to shut off the backup power off, at the expiration of the timer.

25. (Original) The system of claim 24, wherein the circuit is further equipped to receive a AC condition signal indicating whether AC presence or absence, and condition the generation of the shut off signal based on the AC condition signal.

26. (Original) The system of claim 21 wherein the system further comprises a controller to control at least a selected one of an input and an output of the system, and the timer is a part of the controller.

27. (Original) The system of claim 21, wherein the timer is a part of the power supply.

28. (Original) The system of claim 15, wherein the arrangement is further equipped to accept for the system a specification of the period of time.

29. (Original) The system of claim 15, wherein the system further comprises a networking interface.

30. (Currently Amended) A power supply comprising:

an output interface;

a backup power source; and

a switch conditionally coupling the integral backup power source to the output interface to output power through the output interface during absence of AC to the power supply, including a control interface accessible during a suspended-to-memory state of a host device hosting the power supply to allow the backup power source to be uncoupled from the output interface to stop the backup power source from outputting power through the output interface after the host device has entered the suspended-to-memory state, during which state no data are transmitted, and further after the host device has drawn on the backup power source for a time period while in the suspended-to-memory state.

31. (Original) The power supply of claim 30, wherein the power supply further comprises a monitor to monitor for presence or absence of AC to the power supply, and to generate a signal indicating the presence or absence of AC accordingly.

32. (Original) The power supply of claim 30, wherein the power supply further comprises a timer settable to expire after a period of time to shut off the backup power source.

33. (Currently Amended) An article of manufacture comprising:

a storage medium;

a plurality of programming instruction stored therein, designed to enable an apparatus to be able to perform, when the apparatus is in an AC absence condition, at least a selected one of

(a) setting a real time clock (RTC) to initiate waking of the apparatus after the apparatus has been placed into a suspended-to-memory state in response to the AC absence condition, under which state no data are transmitted, and after passing of a period of time while the apparatus is in the suspended-to-memory state, to enable automatic shut off of a backup power source of the apparatus, and

(b) setting a timer to expire after the period of time while the apparatus is in the suspended-to-memory state, to facilitate automatic shut off of a backup power source of the apparatus.

34. (Previously Presented) The article of claim 33, wherein the programming instructions are further designed to enable the apparatus to perform the selected one of the setting operations, when intervening a process to suspend the apparatus.

35. (Original) The article of claim 33, wherein the programming instructions are further designed to enable the apparatus to cancel the selected one of the settings performed, as part of a resume process to resume the apparatus into an active state in response to AC being re-present at the apparatus.

36. (Original) The article of claim 33, wherein the programming instructions are further designed to enable the apparatus to shut off the backup power source when the RTC initiates waking of the apparatus after passing of the time period.

37. (Original) The article of claim 36, wherein the programming instructions are further designed to enable the apparatus to perform the shut off conditioned on AC remains absent at the apparatus.

38. (Original) The article of claim 33, wherein the programming instructions implement the enabling of the apparatus to perform the selected one of the setting operations as part of a basic input/output system (BIOS).